Docket No.: 30835/183230
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Christian Huitema et al.

Application No.: 09/955,923   Confirmation No.: 9393

Filed: September 19, 2001   Art Unit: 2142

For: PEER-TO-PEER GROUP MANAGEMENT   Examiner: D. B. Blair
AND METHOD FOR MAINTAINING PEER-
TO-PEER GRAPHS

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This appeal brief is submitted in response to the Notice of Non-Compliant Amendment dated August 23, 2006. It also is submitted pursuant to the Notice of Appeal filed May 25, 2006 and the Notice of Panel Decision from Pre-Appeal Brief Review dated July 3, 2006 in connection with the above application.

(1)   REAL PARTY IN INTEREST

The real party in interest is Microsoft, by virtue of an Assignment recorded in the Patent Office on May 22, 2002, at Reel 012915, Frame 0615.

(2)   RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

(3)   STATUS OF CLAIMS

Claims 1-11 are pending and claims 12-53 are withdrawn. Claims 1-11 stand rejected. Specifically, the rejections are as follows:

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Claims 1-11 stand rejected under 35 U.S.C. Sec. 102(e) as being anticipated by U.S. Publication No. 2002/0073204, inventor Dutta et al. ("Dutta").

(4)   STATUS OF AMENDMENTS

Claims 1-10 are in original form. Claim 11 was amended after the First Office Action and this amendment was entered.

(5)   SUMMARY OF CLAIMED SUBJECT MATTER

Claims 1-11 describe a system for naming a peer to peer group. Paragraph 0046. The peer group has a name and a category identification. Paragraph 0046. The peer to peer group may be public or private. Paragraphs 0046, 0049. In general, some of the novel points of claims 1–11 are the specific manner described in each claim of how the name for the peer group (as opposed to individual nodes) is calculated (Paragraph 0047), how category names are calculated (including using hash functions and concatenation) (Paragraph 0047) and how the name of the group is provided to other peers (Paragraphs 0050, 0051, 0052, Fig. 2).

(6)   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issue is whether claims 1 through 11 are anticipated under 35 U.S.C. Sec. 102(e) by Dutta. More specifically, the issue is whether Dutta discloses specific elements in each of the claims as is required by 102(e).

(7)   ARGUMENT

It is the applicant's view that each claim is distinct and as such, each claim will be argued separately. If the Board desires to focus on a single claim, the Applicant encourages the Board to use claim 2.

Dutta Reference

U.S. Patent Application Publication No. 2002/0073204, inventor Dutta et al ("Dutta") describes a system where data about the nodes connected to each other on a peer to peer network are displayed and a user can decide whether to stay connected to the other nodes on the peer to peer network. In paragraph 60, Dutta describes "Information categories" provided by the user that provide the most concise information that is being shared by the characterized node. Fig. 6 may illustrate this information. The categories may also be

derived through scanning or an information category may be manually entered by a user in accordance with a standard dictionary of information categories.

Anticipation

In order for a claim to be anticipated under § 102, the anticipating reference must disclose at least one embodiment that incorporates all of the claimed elements. See, for example, C.R. Bard, Inc. v. M3 Systems, 48 U.S.P.Q.2d 1225, 1230 (Fed. Cir. 1998)("When the defense of lack of novelty is based on a printed publication that is asserted to describe the same invention, a finding of anticipation requires that the publication describe all of the elements of the claims, arranged as in the patented device")(emphasis added); In re Bond, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)("For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference... These elements must be arranged as in the claim under review...")(emphasis added).

In regard to each of the claims, there are elements in each of the claims that are not in Dutta. In order to make a prima facie case, the Office action must demonstrate that all the elements of the claims are in Dutta. The Office actions have simply failed to do so. Elements are said to be anticipated by entire paragraphs of Dutta but the specific elements from the claims are not present in the cited paragraphs or the entire reference. Accordingly, a prima facie case has not been made.

CLAIM 1: Claim 1 describes a method of forming a peer-to-peer group that starts with selecting a friendly name (NameG) for a group. The method calculates a category identification (CID) for the group. The CID is provided to a peer so that the peer may use the CID to join the group if they so desire.

The first Office action cited to paragraphs 0062-0064 of Dutta as disclosing these elements. In response, the Applicant pointed out that Dutta does not disclose a calculate CID for the group that is provided to a peer. The Final Office action countered that Dutta discloses names used by individual nodes to describe information categories such as Medicine, Geology, etc. of which that individual node has an interest. Accordingly, the Final Office action is equating the categories in Dutta to the calculated CID in the pending claims.

A SINGLE ELEMENT IN DUTTA CANNOT BE USED TO ANTICIPATE TWO ELEMENTS IN THE PENDING CLAIMS

Claim 1 calls for both a CID and a NameG. These are separate claim elements. Dutta discloses that an individual node may broadcast a characterization of itself. Assuming an individual node's characterization of itself in Dutta anticipates the claimed calculated CID as put forth in the Office action, the element of a friendly name (NameG) is not disclosed in Dutta. Dutta does not disclose both a friendly group name and a calculated CID as in the pending claims.

A more reasonable reading of Dutta would be that the individual nodes' characterization of itself in Dutta is similar to a friendly group name. A friendly name is much more similar in description to the categories in Dutta. In this interpretation, a CID is not disclosed in Dutta. In addition, under this more reasonable interpretation, Dutta shares categories which are similar to friendly group names, but the claims call for CIDs to be shared, not group names.

Further, the use of the CID and NameG is not a trivial limitation. In order to make the claimed system operate, the CID and NameG are necessary.

In short, the categories in Dutta cannot be used to anticipate by BOTH the CID and the friendly name. These are separate claim elements but Dutta only discloses a single element. The law on anticipation is clear that all the elements from a claim must be present in the prior art reference. All the elements from the pending claim 1 are not present in Dutta.

NO GROUP NAME

Second, in Dutta, each node publishes only information categories, and these information categories may be searched but there is no disclosure of the connected nodes having a group name. This can also bee seen in Fig. 6 where Info Areas are disclosed, but there is no name for the group. According to the pending claims, a group of Star Trek fans could have the same information category (CID) but could have a completely different group name (NameG), like Trekkies. In Dutta, the individual nodes only advertise information categories.

This difference is not just semantics. This is a difference in how nodes contact and communicate with each other.

NO GROUP CID

Third, Dutta discloses individual nodes sharing category information specific to that node while the claims call for the CID to be calculated for the group. Again, this difference is not just semantics. This is a difference in how nodes contact and communicate with each other.

CLAIM 2:   Claim 2 further describes claim 1 to include that the CID is calculated by hashing the NameG using a seed of "GROUP." The first Office Action points to "paragraph 67, Gnutella" as anticipating this claim.

Similar to claim 1, the applicant does not find the teaching of calculating a category ID by hashing anywhere in the entire Dutta reference, let alone in paragraph 67 or in the discussion of Gnutella. A search for the term "hash" in Dutta does not return a single match. Hashing is a well known term and concept and there are few synonyms for hashing. Paragraph 67 of Dutta discusses function IDs which are shorthand for a certain request. The term "hash" and concept are not present in Dutta. The law on anticipation is clear that all the elements from a claim must be present in the prior art reference. All the elements from the pending claim 2 are not present in Dutta.

In addition, as claim 2 is dependent on claim 1 and elements of claim 1 are not present, the rejection fails for the same reasons as discussed under claim 1.

CLAIM 3:   Claim 3 further describes claim 1 to include that the peer to peer group is private and that the when the CID is provided to a peer, the CID is sent out of band. As to claim 3, the Office action states:

> Dutta teaches the method of claim 1 wherein the peer-to-peer
> group is to be private, wherein the step of providing the CID to
> a peer comprises the step of sending the CID to the peer out of
> band (paragraphs 62-64).

Similar to claim 1, the applicant does not find the teaching of a group being private in Dutta. Dutta describes nodes that can easily discover each other which would describe a public network.

The applicant also does not find the teaching of sending the CID to the peer out of band in the Dutta reference. The term and concept of in and out of band are not present in

Dutta. The lack of sending the CID out of band in Dutta makes logical sense as Dutta is only concerned with public peer-to-peer groups. There is no purpose in keeping the CID in another channel in Dutta as the groups are public. The law on anticipation is clear that all the elements from a claim must be present in the prior art reference. All the elements from the pending claim 3 are not present in Dutta.

In addition, as claim 3 is dependent on claim 1 and elements of claim 1 are not present, the rejection fails for the same reasons as discussed under claim 1.

CLAIM 4: Claim 4 describes claim 1 to include that the peer to peer group is public and that providing the CID to other peers comprises registering the CID with a Peer Name Resolution Protocol ("PNRP") for discovery. As to claim 4, the Office action states:

> Dutta teaches the method of claim 1, wherein the peer to peer group is to be public wherein the step of providing the CID to a peer comprises the step of registering the CID with a peer-to-peer name resolution protocol (PNRP) for discovery (paragraph 67, Gnutella).

Neither paragraph 67 nor the discussion of Gnutella in Dutta discloses a peer name resolution protocol. Paragraph 67 discusses using ping and pong messages to gather information about nodes in a network which is not the same as a peer name resolution protocol. Further, the peer name resolution protocol is claimed to allow the CID to be discovered therethrough which is not the same as using ping and pong messages as in Gnutella. In fact, the peer name resolution protocol may eliminate the need for traffic hogging ping and pong messages. While a peer name resolution protocol may be inherent in Gnutella, there is no specific disclosure in Dutta of a peer name resolution protocol and inherency has not been put forth by the Office actions.

The applicant submits that claim 4 is dependent on claim 1 and elements of claim 1 are not present, the rejection fails for the same reasons as discussed under claim 1.

CLAIM 5: Claim 5 further describes claim 4 and calls for concatenating a peer ID with the CID to get <u>CID:ID</u> and registering <u>CID:ID</u> for discovery. As to claim 5, the Office action states:

> Dutta teaches the method of claim 4, further comprising the steps of concatenating a peer ID with the CID (paragraphs 68-70).

Paragraphs 68-70 of Dutta appear to disclose a pop-up box being displayed. However, claim 5 also calls for "concatenating a peer ID with the CID to derive CID:ID, and registering CID:ID with PNRP for discovery therethrough." The concept of concatenating addresses is entirely absent from Dutta, including paragraphs 68-70.

In addition, as claim 5 is dependent on claim 4 and claim 4 is dependent of claim 1 and elements of claim 1 are not present in Dutta, the rejection fails for the same reasons as discussed under claims 1 and 4.

CLAIM 6: Claim 6 further describes claim 1 to include receiving a connect message and in response, communicating a welcome message. As to claim 6, the Office action states:

> Dutta teaches the method of claim 1 further comprising the
> steps of receiving connect messages from the peer and
> returning a welcome message to the peer (paragraph 67,
> Gnutella).

Applicant agrees that paragraphs 68-70 of Dutta appear to disclose a pop-up box being displayed which may be similar to a welcome message. As claim 6 is dependent on claim 1 and elements of claim 1 are not present, the rejection fails for the same reasons as discussed under claim 1.

CLAIM 7: Claim 7 further describes claim 6 to include calculating a signature of a group object database and sending signature to a peer. As to claim 7, the Office action states:

> Dutta teaches the method of claim 6 further comprising the
> steps of calculating a signature of a group object database
> (paragraph 67, Gnutella).

The applicant does not find the teaching of calculating a signature of a group object database in the Dutta reference, let alone in paragraph 67. Paragraph 67 discusses Pong messages and function IDs which discover information about individual nodes, but not calculating a signature of a group object database. Again, the term and concept of calculating a signature of a group rather than individual nodes is not present in Dutta.

In addition, as claim 7 is dependent on claim 1 and elements of claim 1 are not present, the rejection fails for the same reasons as discussed under claim 1.

CLAIM 8:   Claim 8 further describes claim 7 to further describe calculating a signature of a group to include:

> Combining a unique ID (UID), a sequence number (SNUM) and an age for each group in the group object database and sorting a list of the combined UID/SNUMs/ages for the group object

As to claim 8, the Office action states:

> Dutta teaches the method of claim 7, including combining a unique ID with a sequence number and age (paragraph 67, Gnutella).

The applicant does not find the teaching of combining a unique ID with a sequence number and age in the Dutta reference, let alone in paragraph 67. Paragraph 67 discusses ping & pong messages and function IDs, not combining a unique ID with a sequence number and age. Further, the concept of SNUM (sequence number for a message) and age are total absent from Dutta. Again, the term and concept of combining a unique ID with a sequence number and age is not present in Dutta.

In addition, as claim 8 is dependent on claim 7 and claim 7 is dependent on claim 1 and elements of claims 1 and 7 are not present, the rejection fails for the same reasons as discussed under claims 1 and 7.

CLAIM 9:   Claim 9 further describes claim 7 to include receiving a request for a specific group object from the peer and transmitting the specific group objects to the peer. As to claim 9, the Office action states:

> Dutta teaches the method of claim 7, comprising the steps of receiving a request a specific group of objects (paragraph 67, Gnutella).

As claim 9 is dependent on claim 7 and claim 7 is dependent on claim 1 and elements of claims 1 and 7 are not present, the rejection fails for the same reasons as discussed under claims 1 and 7.

CLAIM 10:   Claim 10 calls for receiving a connect message from the peer and returning a refuse message to the peer along with a list of members of the group. As to claim 10, the Office action states:

> Dutta teaches the method of claim 1 further comprising the
> steps of receiving a connect message from a peer and returning
> a refuse message to the peer along with a list of other members
> of the group (paragraph 67, Gnutella).

The applicant does not find the teaching of returning a refuse message to the peer along with a list of other members of the group in the Dutta reference, let alone in paragraph 67. Paragraph 67 discusses ping & pong messages and function IDs, not receiving a connect message from a peer and returning a refuse message to the peer along with a list of other members of the group. Again, the term and concept of receiving a connect message from a peer and returning a refuse message to the peer along with a list of other members of the group is not present in Dutta.

In addition, as claim 10 is dependent on claim 1 and elements of claim 1 are not present, the rejection fails for the same reasons as discussed under claim 1.

CLAIM 11:   Claim 11 calls for claim 1 to be implemented on a computer readable medium. Claim 23 of Dutta does call for a computer readable medium. However, pending claim 11 calls for the execution of the steps in claim 1 and as elements of claim 1 are missing from Dutta as explained previously, the Office action has failed to create a prima facie case.

(8) CONCLUSION

For the foregoing reasons, it is respectfully submitted that claims 1-11 are not

anticipated by Dutta. Appellants therefore request that the rejection of the claims be

reversed.

Respectfully submitted,

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APPENDIX
Claims on Appeal

1.   (Original) A method of forming a peer-to-peer group, comprising the steps of selecting a friendly name for the group ($NAME_G$), calculating a category identification (CID) for the group, and providing the CID to a peer.

2.   (Original) The method of claim 1, wherein the step of calculating the CID comprises the step of hashing the $NAME_G$ with a seed GROUP.

3.   (Original) The method of claim 1 wherein the peer-to-peer group is to be private, wherein the step of providing the CID to a peer comprises the step of sending the CID to the peer out of band.

4.   (Original) The method of claim 1 wherein the peer-to-peer group is to be public, wherein the step of providing the CID to a peer comprises the step of registering the CID with a peer-to-peer name resolution protocol (PNRP) for discovery therethrough.

5.   (Original) The method of claim 4, further comprising the steps of concatenating a peer ID with the CID to derive CID:ID, and registering CID:ID with PNRP for discovery therethrough.

6.   (Original) The method of claim 1, further comprising the steps of receiving a connect message from the peer and returning a welcome message to the peer.

7.   (Original) The method of claim 6, further comprising the steps of calculating a signature of a group object database, and sending the signature to the peer.

8.   (Original) The method of claim 7, wherein the step of calculating the signature of the group object database comprises the steps of combining a unique identification (UID), sequence number (SNUM), and age for each group object in the group object database, and sorting a list of the combined UIDs/SNUMs/ages for the group objects.

9.   (Original) The method of claim 7, further comprising the steps of receiving a request for specific group objects from the peer, and transmitting the specific group objects to the peer.

10.   (Original) The method of claim 1, further comprising the steps of receiving a connect message from the peer and returning a refuse message to the peer along with a list of other members of the group.

11.   (Previously Amended) A tangible computer-readable medium having computer-executable instructions for performing the method of claim 1.

Evidence Appendix

None.

Related Proceedings Appendix

None.